

ABSTRACT OF THE DISCLOSURE

Prior colloidal crystal preparation means requires much workmanship to obtain colloidal crystals, relying much on the expertise of an operator. To utilize
5 colloidal crystals in various fields and develop them from now on, it is in demand to establish preparation means capable of preparing colloidal crystals with good reproducibility. The object of the invention is to meet such demand.

10 A gas compressed in a compressor (1) is controlled by a gas pulse controller (3) to generate compressed air pulses, and the pulses are then guided to a colloidal crystal preparation vessel (6) having a flat plate type capillary portion to produce a pressure fluctuation, which
15 is in turn used as driving power, thereby giving a flow and hard-stopping motion to a colloidal solution in the flat plate type capillary for formation of colloidal crystals of good single crystallinity.